

CLAIMS

1. A consumable electrode type welding method in which, using a welding system comprising wire feed means for feeding a welding wire to a welding torch, an actuator for holding and moving the welding torch, a control unit for driving and controlling the actuator, and a welding power supply device for applying a welding output into between a member to be welded and the welding wire, the method comprising the steps of:

5 moving the welding torch by the actuator in a direction parting away from the member to be welded while feeding the welding wire; and
10 controlling the speed of the welding wire with respect to the member to be welded.

2. A consumable electrode type welding method as set forth in Claim 1,
15 wherein, at a welding start time, firstly, the welding wire is fed while the actuator is stopped and, after the welding wire is contacted with the member to be welded, while applying a welding output, the welding torch is pulled apart from the member to be welded at a speed equal to or higher than the feed speed of the welding wire by the actuator.

20 3. A consumable electrode type welding method as set forth in Claim 2,
wherein, at a welding start time, firstly, while the actuator is stopped, the speed for feeding the welding wire is set equal to or lower than the feed speed of the welding wire in a normal welding time and, after the welding torch is pulled apart from the member to be welded, the feed speed of the welding wire is changed to the feed speed of the welding wire in the above normal welding time.
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4. A consumable electrode type welding method as set forth in Claim 2 or 3,
wherein, after contact of the welding wire with the member to be welded, while applying the welding output, the welding torch is pulled apart from the member to be welded to a given distance at the speed equal to or higher than the feed speed of the welding wire by the actuator and, after then, the movement of the welding torch in the pull-apart direction is caused to stop.
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5. A consumable electrode type welding method as set forth in Claim 1,
wherein, in a welding end time, while reducing the feed speed of the welding wire as well
as the welding output, the welding torch is pulled apart from the member to be welded at a
5 speed equal to or higher than the feed speed of the welding wire by the actuator and, at a
timing where the feed speed of the welding wire balances substantially with the moving
speed of the actuator, the welding output is caused to stop.
6. A consumable electrode type welding method as set forth in Claim 5,
10 wherein, at least until the feed speed of the welding wire reaches zero, the welding torch is
moved by the actuator in a direction where it is pulled apart from the member to be
welded.
7. A consumable electrode type welding method as set forth in Claim 5 or 6,
15 wherein, until the leading end position of the welding wire reaches a distance between the
welding wire leading end and the member to be welded in the welding start time, the
welding torch is pulled apart from the member to be welded by the actuator.